

Work Order ID 110183

December-17-13 9:17:42 AM

110183

Page 1

Item ID: D350-689-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Dual High Back Seat Installation

Start Date: 12/17/13 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-12-18

Tooling:

Date:

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____

Date:

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

| | |
|---------|---|
| DSI9588 | B |
|---------|---|

| | |
|--------------|---|
| IIN-D350-689 | B |
|--------------|---|

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-011 CHG006

DAS
6
9-89

14/11/10 (12)

MLJ 14-01-10

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

DAS
32
9-89

17/02/10 (1)

DAS
31
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|--|---|--|

Work Order ID 110183

December-17-13 9:17:42 AM

110183

Page 2

Item ID: D350-689-011 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Dual High Back Seat Installation
Start Date: 12/17/13 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 12/17/13 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120 | QC4- 100% Inspect kits for completeness | 0.00 | | | | | | | |
| *120* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 130 | | 0.00 | | | | | | | |
| *130* | Packaging | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and pack for shipping as per PPP D350-689-011 | | | | | | | | |
| | Location: _____ | | | | | | | | |
| | PPP Rev: _____ | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

DAS
6
9-89

14/1/10

R

DAS
6
9-89

14/1/10

S

14-01-10

MF

14-01-10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|--|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|--|---|

Picklist Print

December-17-13 9:17:42 AM

Page 1

Work Order ID: 110183

Parent Item: D350-689-011

Parent Item Name: Dual High Back Seat Installation

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B03.05.09Reformat; Modify Step 1KJ/RF IPP Rev:C chg003 per DSI 9498 DD
10.02.11 verified by:JLM IPP REV:D 11.11.24 AS PER ECN11-674 DD VERF:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|--------------|---------------|----------------|-------------------|
| D350-689-013 Floor Provisions | DAS 6 9-89 | Manufactured | No | | | 110 | Each | 1.0000 | 1 | 108507 | | | DAS 31 9-89 |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | DAS 6 9-89 | | | FG041 | | 1 | | | | | | | |
| | | | | 108106 | | 1 | | | | | | | |
| D350-689-041 Dual High Back Seat Assembly | | Manufactured | No | | | 110 | Each | 0.0000 | 1 | 111265 | | | DAS 31 9-89 |
| D3018-1 Seat Cushion | DAS 6 9-89 | Manufactured | No | | | 110 | Each | 2.0000 | 1 | | | | DAS 32 9-89 |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST264A | | 2 | | | | | | | |
| | | | | 106774 | | 1 | | | | | | | |
| | | | | 88355 | | 1 | | | | 88305 | | | DAS 31 9-89 |
| D3019-1 Back Cushion | DAS 6 9-89 | Manufactured | No | | | 110 | Each | 2.0000 | 1 | | | | DAS 32 9-89 |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST264A | | 2 | | | | | | | |
| | | | | 106820 | | 2 | | | | 106820 | | | DAS 31 9-89 |

12/10/13 (1)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Crosstube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design <input type="checkbox"/> | | | | | | | | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Handling/Pre <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Offset/Setup <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Transport <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|--|---|--|

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. B AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 1

REF. TCCA STC: SH02-33
REF. FAA STC: SR01620NY
REF. EASA STC: EASA.IM.R.S.01453
REF. TCA STC: 2005S03-09

1.0 PURPOSE

For D350-689-011/-013 at CHG 006/005 and later and D350-689-021/-023 Kits at CHG 005/004 and later, the D3026-1 Channel has been replaced with the D4575-1 Beam and D4575-3 Doubler and the D3234-3 Doubler has been removed. Consequently, the installation instructions for D350-689-011/-013 at CHG 006/005 and D350-689-021/-023 at CHG 005/004 are updated per Section 2.0 of this Service Instruction. The parts list update is shown in Section 4.0 of this Service Instruction. There is a negligible change to the weight and balance.

2.0 INSTALLATION CHANGES FOR D350-689-013

Section 3.9, *INSTALLATION OF D350-689-013 FLOOR PROVISIONS KIT* (pages 4 and 5 of IIN-D350-689), is changed as follows:

Item 3.3.15 is:

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer as shown in Figure 1 of this Service Instruction. Transfer drill existing holes from the aircraft floor to the D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer as shown in Figure 1 of this Service Instruction and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

Note: Drill a Ø1.00" (Ø25.4 mm) hole in the D4575-1 Beam to clear extension tube of collective and cutout as required for clearance of collective opening and fwd bulkhead as shown in Figure 3 of this Service Instruction.

Item 3.3.15 was:

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D3026-1 Channel as shown in Figure 4 and transfer existing holes from the aircraft floor to the D3026-1 Channel & D3032-1 Spacer. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D3026-1 Channel & D3032-1 Spacer as shown in Figure 4 and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

Item 3.3.17 is:

Counter sink holes in the D3032-1 Spacer for MS20426AD4 rivets. Install D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer to floor using MS20426AD4 rivets.

Item 3.3.17 was:

Counter sink holes in the D3032-1 Spacer for MS20426AD4 rivets. Install D3026-1 Channel and D3032-1 Spacer using MS20426AD4 rivets.

Item 3.3.22 is:

Rivet D3234-1 Doubler to D3025-1 Beam as shown in Figure 7 using MS20470AD4 rivets. Continue at step 3.3.25.

Item 3.3.22 was:

Rivet D3234-1 Doubler to D3025-1 Beam and D3234-3 Doubler to D3026-1 Channel as shown in Figure 7 using MS20470AD4 rivets. Continue at step 3.2.25.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 12.11.09

CERT. NO.: SH02-33

ISSUE NO.: 1

| | | | |
|------------|--|--|--------------|
| B | CHANGES TO -013 KIT INSTALLATION. REF: CIR12-12. | MB | 12.11.09 |
| A | NEW ISSUE | MB | 11.12.22 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. B |
| MFG. APPR. | N/A | DSI 9588 | SHEET 1 OF 6 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | INSTALLATION CHANGE | NTS |
| DATE | 12.11.09 | COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |

110183 MCS
13-12-08

3.0 INSTALLATION CHANGES FOR D350-689-023

Section 3.9, *INSTALLATION OF D350-689-023 ENERGY ATTENUATING FLOOR PROVISIONS KIT* (pages 8 and 9 of IIN-D350-689), is changed as follows:

Item 3.9.8 is:

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D4575-1 Beam and D4575-3 Doubler as shown in Figure 2 of this Service Instruction. Transfer drill existing holes from the aircraft floor to the D4575-1 Beam and D4575-3 Doubler. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D4575-1 Beam and D4575-3 Doubler as shown in Figure 1 of this Service Instruction and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

Note: Drill a Ø1.00" (Ø25.4 mm) hole in the D4575-1 Beam to clear extension tube of collective and cutout as required for clearance of collective opening and fwd bulkhead as shown in Figure 3 of this Service Instruction.

Item 3.9.8 was:

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D3026-1 Channel as shown in Figure 4 and transfer existing holes from the aircraft floor to the D3026-1 Channel. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D3026-1 Channel as shown in Figure 4 and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

Item 3.9.10 is:

Attach D4575-1 Beam and D4575-3 Doubler to floor using qty (14) MS20426AD4 rivets.

Item 3.9.10 was:

Attach D4575-1 Channel to floor using qty (14) MS20426AD4 rivets.

Item 3.9.12 is no longer applicable:

~~Rivet D3234-3 Doubler to D3026-1 Channel as shown in Figure 7 using MS20470AD4 rivets.~~

Item 3.9.12 was:

Rivet D3234-3 Doubler to D3026-1 Channel as shown in Figure 7 using MS20470AD4 rivets.

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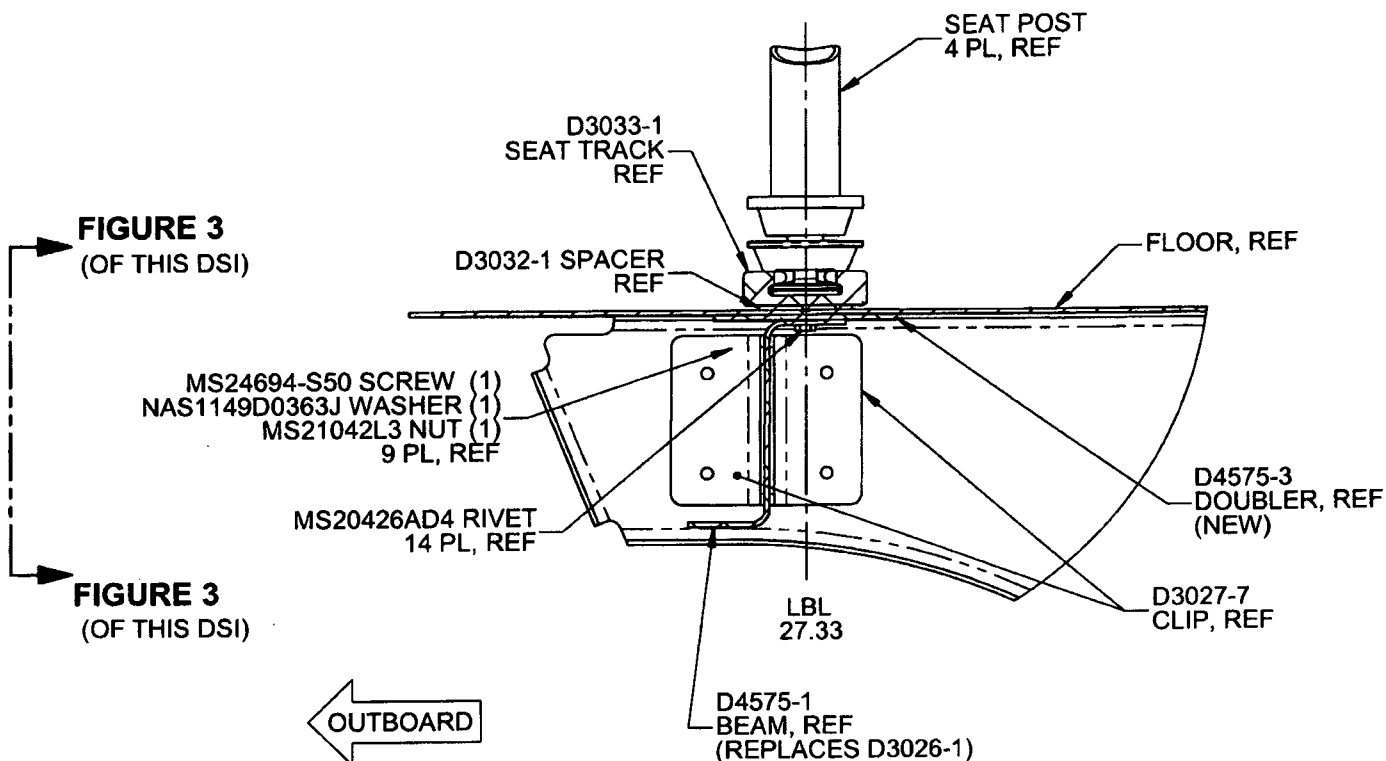
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CROSS SECTION VIEW F-F/M-M: From Figures 5 and 7 (IIN-D350-689)
CROSS SECTION VIEW F-F/M-M: From Figures 25-5 and 25-7 (ICA-D350-689)

FIGURE 1: UPDATES TO CROSS SECTIONS F-F AND M-M

With reference to Figures 5 and 7 of IIN-D350-689
 (Figures 25-5 and 25-7 of ICA-D350-689)

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With reference to Figures 19 and 20 of IIN-D350-689
(Figures 25-19 and 25-20 of ICA-D350-689)

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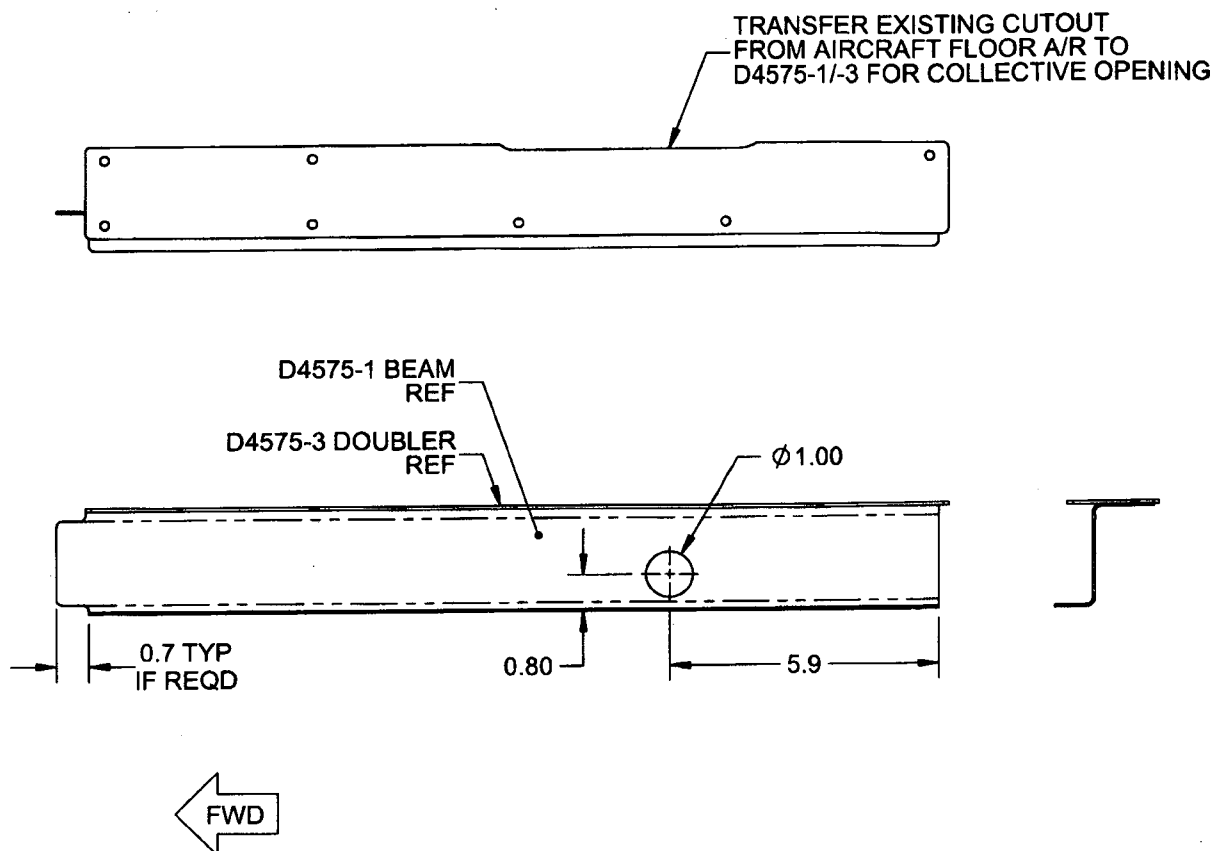


FIGURE 3: RELIEFS ON D4575-1/-3
(ONLY D4575-1/-3 SHOWN FOR CLARITY)
VIEW LOOKING INBOARD

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4.0 PARTS LIST CHANGE

The parts list of D350-689-021/-023 at CHG 005/004 or later is amended as follows:

5. PARTS LIST (IIN-D350-689) 25.10 PARTS LIST (ICA-D350-689)

IS:

| Qty -011 | Qty -013 | Qty -015 | Qty -017 | Qty -019 | Qty -021 | Qty -023 | Qty -041 | Qty -043 | Part Number | Description |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--|
| X | | | | | | | | | D350-689-011 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| 1 | X | | | | | | | | D350-689-013 | FLOOR PROVISIONS KIT |
| | | X | | | | | | | D350-689-015 | SEAT MODIFICATION KIT |
| | | | X | | | | | | D350-689-017 | SHOULDER HARNESS KIT |
| | | | | X | | | | | D350-689-019 | CONTROL GUARD KIT |
| | | | | | X | | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | | | | | 1 | X | | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| 1 | | | | | | | X | | D350-689-041 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | 1 | | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | | | | | D3026-1 | CHANNEL (REMOVED) |
| | | | | | | | | | D3234-3 | DOUBLER (REMOVED) |
| | 1 | | | | | 1 | | | D4575-1 | BEAM (REPLACES D3026-1) |
| | 1 | | | | | 1 | | | D4575-3 | DOUBLER (NEW) |

WAS:

| Qty -011 | Qty -013 | Qty -015 | Qty -017 | Qty -019 | Qty -021 | Qty -023 | Qty -041 | Qty -043 | Part Number | Description |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--|
| X | | | | | | | | | D350-689-011 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| 1 | X | | | | | | | | D350-689-013 | FLOOR PROVISIONS KIT |
| | | X | | | | | | | D350-689-015 | SEAT MODIFICATION KIT |
| | | | X | | | | | | D350-689-017 | SHOULDER HARNESS KIT |
| | | | | X | | | | | D350-689-019 | CONTROL GUARD KIT |
| | | | | | X | | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | | | | | 1 | X | | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| 1 | | | | | | | X | | D350-689-041 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | 1 | | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | 1 | | | | | 1 | | | D3026-1 | CHANNEL |
| | 1 | | | | | 1 | | | D3234-3 | DOUBLER |

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9-89

4. WEIGHT AND BALANCE

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

| Installation | Weight | LATERAL | | LONGITUDINAL | |
|--|--------------------|---------------------|----------------------------|-------------------|---------------------------|
| | | Arm | Moment | Arm | Moment |
| D350-689-011 Dual High Back Seat Installation, Fwd Position | 27.6 lb 12.5 kg | -18.2 in -0.46 m | -502 in-lb -5.8 m-k-g | 60.7 in 1.54 m | 1675 in-lb 19.3 m-k-g |
| D350-689-013 Floor Provisions Kit, Fwd Position | 2.0 lb 0.9 kg | -18.2 in -0.46 m | -36 in-lb -0.4 m-k-g | 60.7 in 1.54 m | 121 in-lb 1.4 m-k-g |
| D350-689-011 Dual High Back Seat Installation, Aft Position | 28.1 lb 12.7 kg | -18.2 in -0.46 m | -511 in-lb -5.8 m-k-g | 63.7 in 1.62 m | 1790 in-lb 20.57 m-k-g |
| D350-689-013 Floor Provisions Kit, Aft Position | 3.1 lb 1.4 kg | -18.2 in -0.46 m | -56 in-lb -0.6 m-k-g | 62.2 in 1.58 m | 193 in-lb 2.2 m-k-g |
| D350-689-015 Seat Modification Kit | 1.0 lb 0.5 kg | -17.2 in -0.44 m | -17 in-lb -0.22 m-k-g | 60.7 in 1.54 m | 61 in-lb 0.77 m-k-g |
| D350-689-017 Shoulder Harness, Fwd Position | 4.4 lb 2.00 kg | -18.2 in -0.46 m | -80.1 in-lb -0.92 m-k-g | 60.7 in 1.54 m | 267 in-lb 3.08 m-k-g |
| D350-689-017 Shoulder Harness, Aft Position | 4.4 lb 2.00 kg | -18.2 in -0.46 m | -80.1 in-lb -0.92 m-k-g | 64.7 in 1.64 m | 285 in-lb 3.28 m-k-g |
| D350-689-019 Control Guard, Fwd Position | 0.5 lb 0.23 kg | -9.0 in -0.23 m | -4.5 in-lb -0.05 m-k-g | 60.7 in 1.54 m | 30 in-lb 0.35 m-k-g |
| D350-689-019 Control Guard, Aft Position | 0.5 lb 0.23 kg | -9.0 in -0.23 m | -4.5 in-lb -0.05 m-k-g | 64.7 in 1.64 m | 32 in-lb 0.38 m-k-g |
| D350-689-021 Dual High Seat Back Installation, LH Fwd Position | 29.2 lb 13.2 kg | -18.2 in -0.46 m | -531 in-lb -6.1 m-k-g | 60.7 in 1.54 m | 1772 in-lb 20.3 m-k-g |
| D350-689-021 Dual High Seat Back Installation, LH Aft Position | 29.2 lb 13.2 kg | -18.2 in -0.46 m | -531 in-lb -6.1 m-k-g | 64.7 in 1.64 m | 1889 in-lb 21.6 m-k-g |
| D350-689-023 Energy Attenuating Floor Provisions Kit | 2.5 lb 1.1 kg | -18.2 in -0.46 m | -46 in-lb -0.5 m-k-g | 62.2 in 1.58 m | 156 in-lb 1.7 m-k-g |

5. PARTS LIST

| Qty -011 | Qty -013 | Qty -015 | Qty -017 | Qty -019 | Qty -021 | Qty -023 | Qty -041 | Qty -043 | Part Number | Description |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|---|
| X | | | | | | | | | D350-689-011 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| 1 | X | | | | | | | | D350-689-013 | FLOOR PROVISIONS KIT |
| | | X | | | | | | | D350-689-015 | SEAT MODIFICATION KIT |
| | | | X | | | | | | D350-689-017 | SHOULDER HARNESS KIT |
| | | | | X | | | | | D350-689-019 | CONTROL GUARD KIT |
| | | | | | X | | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | | | | | 1 | X | | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| | | | | | | | X | | D350-689-041 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | 1 | | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | | | 2 | 2 | D3016-041 | SEAT FRAME ASSEMBLY |
| | | | | | | | 1 | 1 | D3017-041 | BACK FRAME ASSEMBLY |
| | | | | | 1 | | | | D3018-1 | SEAT CUSHION |
| | | | | | 1 | | | | D3019-1 | BACK CUSHION |
| | | | | | | | 1 | 1 | D3021-041 | TUBE ASSEMBLY |
| | | | | | | | 1 | 1 | D3022-1 | SEAT PAN |
| | | | | | | | 1 | 1 | D3023-1 | BACK PANEL |
| | | | | | | | 3 | 3 | D3024-1 | SPACER |
| 1 | | | | | | | | | D3025-1 | BEAM |

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